

Figure 1

1000000000000000

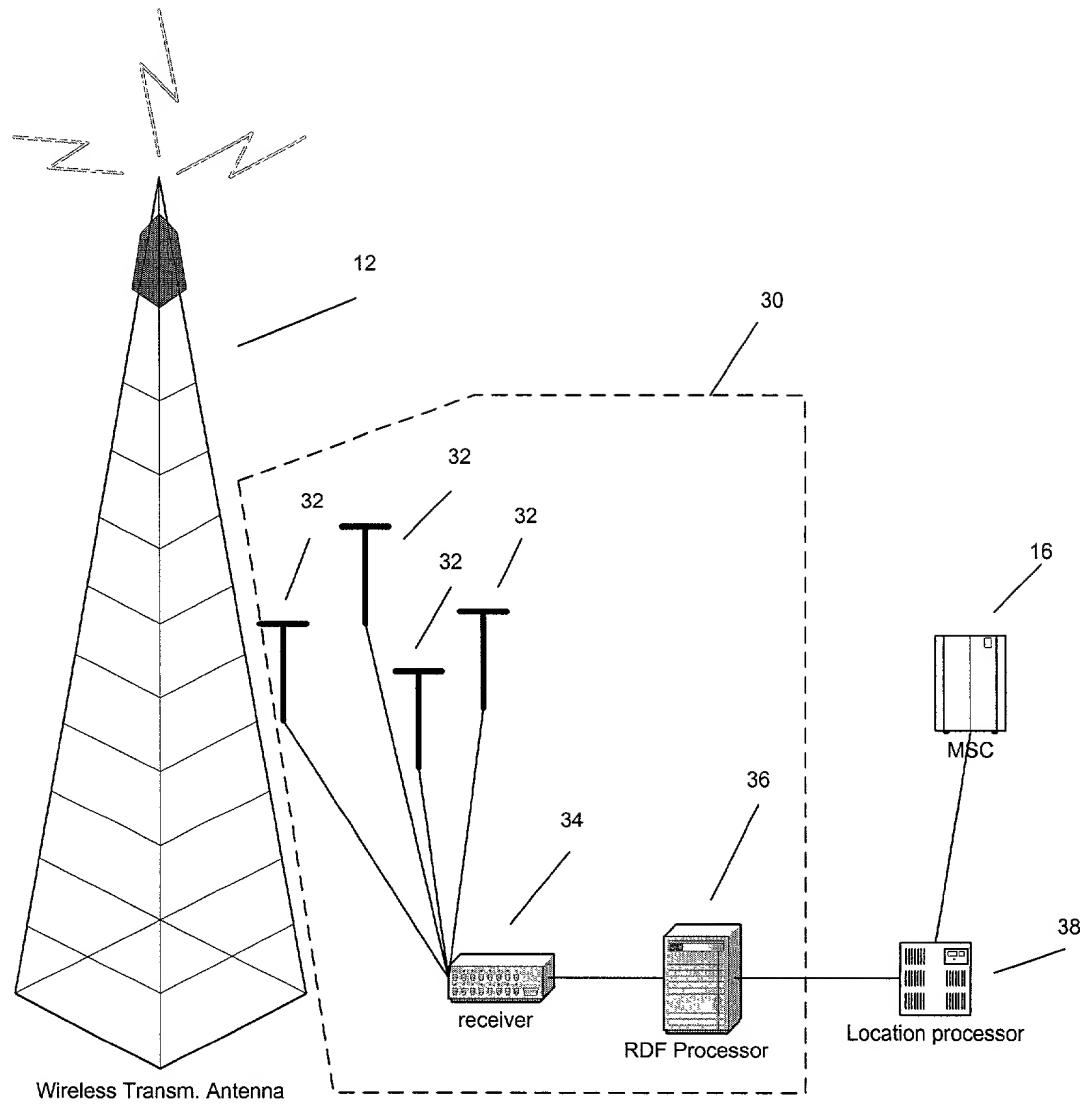


Figure 2

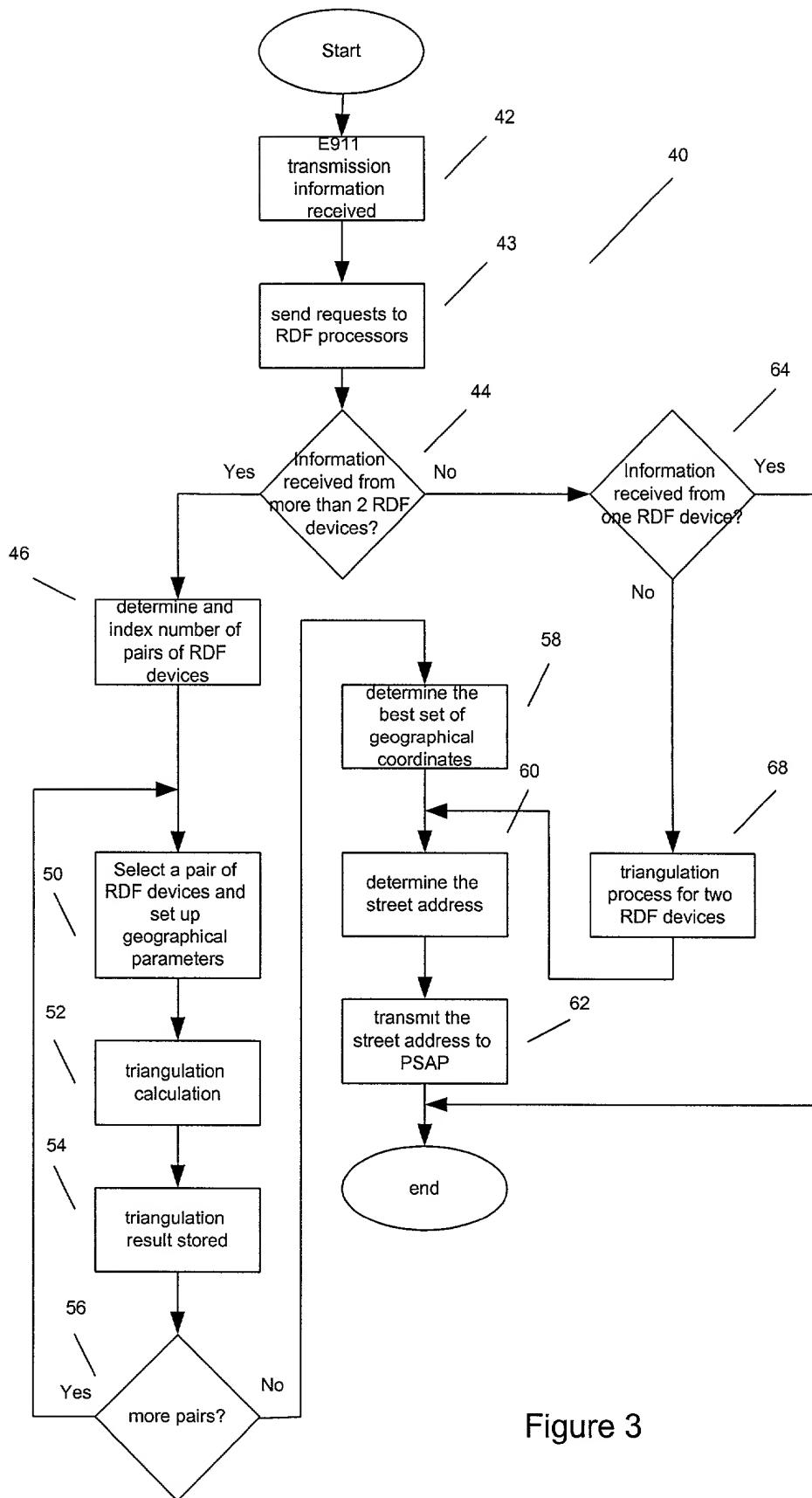


Figure 3

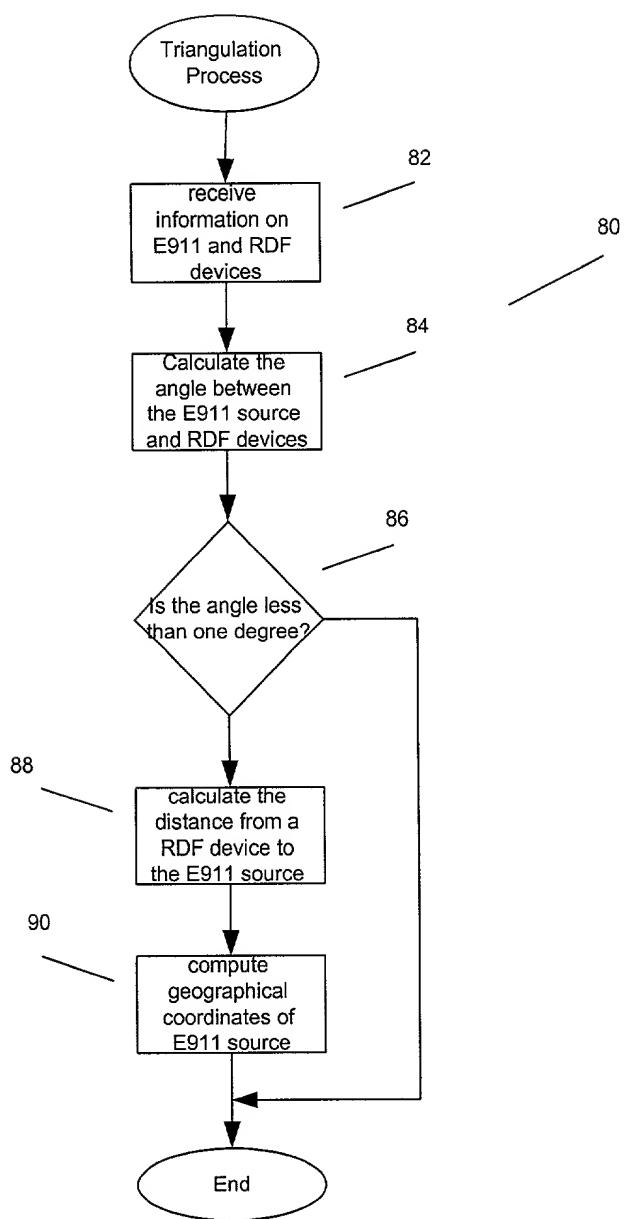
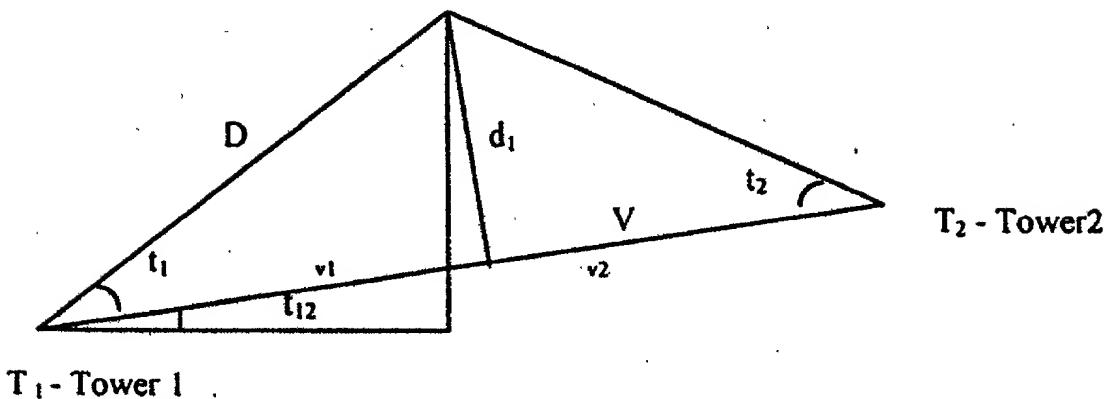


Figure 4

S - Source of E911 call



## DEFINITIONS

$d_1$  is the perpendicular distance from Source, S, to the vector, V, connecting  $T_1$  and  $T_2$

D is the derived distance from S to  $T_1$

V is the length of the vector from  $T_1$  to  $T_2$

$v_1$  is the distance from  $T_1$  to  $d_1$

$t_1$  is the angle from S to  $T_2$

$t_{12}$  is the angle at  $T_1$  from the vector, V, to a line representing the Latitude of  $T_1$

$t_2$  is the angle from S to  $T_1$

V is the sum of  $v_1$  and  $v_2$

$$v_1 = V (\tan t_2) / [(\tan t_1) + (\tan t_2)] \quad \text{Equation 1}$$

$$D = v_1 / \cos t_1 \quad \text{Equation 2}$$

$$\text{Source Latitude} = T_1 \text{ Latitude} + D \sin (t_1 + t_{12}) \quad \text{Equation 3}$$

$$\text{Source Longitude} = T_1 \text{ Longitude} + D \cos (t_1 + t_{12}) \quad \text{Equation 4}$$

FIG 5.